



## PES 301 Epoxy Resin and Hardener

**PES 301 Epoxy Resin and Hardener** is a two component thixotropic solvent free epoxy material used for injection applications, bonding of dissimilar materials, and for use in conjunction with a range of tapes and fabrics to produce high strength composite repairs. The product can be applied to manually prepared surfaces and is ideal for encapsulating problem pipework ranging from 1"-36" diameter. Once cured, the system can resist up to 300 psi pressure. For injection applications the material can be pumped into voids up to 15mm in depth.

### *Main characteristics -*

- Two component
- Solvent free epoxy
- Usable life 25 minutes 68°F (20°C)
- Touch dry 90 mins 68°F (20°C)
- Full cure 5 days 68°F (20°C)
- Up to 300psi pressure tolerance (3x Wrap of glass tape)
- Applied by brush or applicator tool
- Available in 1kg, 3kg, 30kg pack sizes
- Tolerant of less than ideal surface preparation

### *Mechanical Properties –*

#### **Adhesion**

Tensile Shear to ASTM D1002    2100psi    (148kg/cm<sup>2</sup>)

#### **Compressive strength**

Tested to ASTM D 695    14,700psi    (1034kg/ cm<sup>2</sup>)

#### **Corrosion Resistance**

Tested to ASTM B117    Minimum 5000 hours

#### **Flexural Strength**

Tested to ASTM D790    13,000psi    (912kg/cm<sup>2</sup>)

#### **Heat Resistance**

Suitable for water immersion up to 158°F (70°C) and intermittent contact with steam up to 248°F (120°) (when used with glass tape, dry heat resistance up to 302°F (150°C).



**Eroded gas main repaired using PES 301 Epoxy Resin and Hardener and 3 wraps of Glass Tape**



**Main fire water lines encapsulated using PES 301 Epoxy Resin and Hardener and 3 wraps of Glass Tape**